



**BID 50-00132989**

**ONE TIME PURCHASE OF THREE (3) SUBMERSIBLE SOLIDS  
HANDLING SEWER PUMPS AND ONE (1) TRIPLEX VFD CONTROL  
PANEL FOR THE JEFFERSON PARISH DEPARTMENT OF SEWERAGE**

**January 07, 2021 @ 2:00 P.M.**

**ATTENTION VENDORS!!!**

**Please review all pages and respond accordingly, complying with all  
provisions in the technical specifications and Jefferson Parish Instructions  
for Bidders and General Terms and Conditions. All bids must be received in  
the Purchasing Department by the bid due date and time.**

**Jefferson Parish Purchasing Department**

**200 Derbigny Street, Suite 4400**

**Gretna, LA 70053**

**Please Email Any Questions To:**

**Donna Evans**

**DMEVANS@JEFFPARISH.NET**

**504-364-2691**

DATE: 12/14/2020  
BID NO.: 50-00132989

INVITATION TO BID  
THIS IS NOT AN ORDER

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**JEFFERSON PARISH**

PURCHASING DEPARTMENT  
P.O. BOX 9  
GRETN, LA. 70054-0009  
504-364-2678

BUYER: DMEVANS@jeffparish.net

BIDS WILL BE RECEIVED ONLINE VIA [WWW.JEFFPARISHBIDS.NET](http://WWW.JEFFPARISHBIDS.NET) UNTIL 2:00 PM, 1/07/2021 AND PUBLICLY OPENED THEREAFTER IN THE WEST BANK PURCHASING DEPT, SUITE 4400, JEFFERSON PARISH GENERAL GOVERNMENT BUILDING, 200 DERBIGNY STREET, GRETN, LA 70053 AND VIA TELECONFERENCE (DIAL-IN AT (504) 323-1800, MEETING ID: 181357) At no charge, bidders are to submit via Jefferson Parish's electronic procurement page by visiting [www.jeffparishbids.net](http://www.jeffparishbids.net) to register for this free site. Additional instructions are included in the text box highlighting electronic procurement.

LATE BIDS WILL NOT BE ACCEPTED

NOTE: ONLY BIDS WRITTEN IN INK OR TYPEWRITTEN, AND PROPERLY SIGNED BY A MEMBER OF THE FIRM OR AUTHORIZED REPRESENTATIVE, WILL BE ACCEPTED. PENCIL AND/OR PHOTOSTATIC FIGURES OR SIGNATURES SHALL RESULT IN BID REJECTION. HOWEVER, ELECTRONIC SIGNATURES AS DEFINED IN LSA - R.S. 9:2620(8) ARE ACCEPTABLE. SIGNATURE MUST BE A SECURED DIGITAL SIGNATURE.

**INSTRUCTIONS FOR BIDDERS AND GENERAL CONDITIONS**  
**THE FOLLOWING INSTRUCTIONS APPLY TO ALL BIDS**

All bids submitted are subject to these instructions and general conditions and any special conditions and specifications contained herein, all of which are made part of this bid proposal reference. By submitting a bid, vendor agrees to comply with all provisions of Louisiana Law as well be in compliance with the Jefferson Parish Code of Ordinances, Louisiana Code of Ethics, applicable Jefferson Parish ethical standards and Jefferson Parish Resolution No. 113646 and/or Resolution No. 113647 as amended.

Jefferson Parish adheres to the Louisiana Code of Governmental Ethics, contained in Louisiana Revised Statutes Annotated, R.S. 42:1101, et seq. Vendor/Proposer by this submission, warrants that there are no "conflicts of interest" related to this procurement that would violate applicable Louisiana Law. Violation of the Louisiana Code of Governmental Ethics may result in rescission of contract, permit or licenses, and the imposition of fines and/or penalties, without contractual liability to the public in accordance with applicable law.

All vendors submitting bids should register as a Jefferson Parish vendor if not already yet registered. Registration forms may be downloaded from <http://purchasing.jeffparish.net> and by clicking on Vendor Information. Current W-9 forms with respective Tax Identification numbers and vendor applications may be submitted at any time; however, if your company is not registered and/or a current W-9 form is not on file, vendor registration is mandatory. Vendors may experience a delay in payment if your company is not a registered vendor with Jefferson Parish.

All quotations shall be based on F.O.B. Agency warehouse or job site, anywhere within the Parish as designated by the Purchasing Department. This provision does not apply to public works projects

JEFFERSON PARISH requires all products to be new (current) and all work must be performed according to standard practices for the project. Unless otherwise specified, no aftermarket parts will be accepted. Unless otherwise specified, all workmanship and materials must have at least one (1) year guaranty, in writing, from the date of delivery and/or acceptance of the project. Any deviations or alterations from the specifications must be indicated and/or supporting documentation supplied with bid submission.

Bidders should submit all questions in writing via email to the buyer's email address as indicated above, no later than Five (5) working days prior to the bid opening. Bid numbers should be mentioned in all requests. If submitting online, vendors may send questions via the E-Procurement site no later than Five (5) working days prior to the bid opening.

If this bid requires a pre-bid conference (see Additional Requirements section), bidders are advised that such conference will be held to allow bidders the opportunity to identify any discrepancies in the bid specifications and seek further clarification regarding instructions. The Purchasing Department will issue a written response to bidders' questions in the form of an Addendum. Please note that all official communication will be expressed in the form of an addendum.

Visit our website at [HTTP://PURCHASING.JEFFPARISH.NET](http://PURCHASING.JEFFPARISH.NET)



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All formal Addenda require written acknowledgement on the bid form by the bidder. Failure to acknowledge an Addendum on the bid form shall cause the bid to be rejected. JEFFERSON PARISH reserves the right to award bid to next lowest responsive and responsible bidder in this event.

JEFFERSON PARISH will accept one price for each item unless otherwise indicated. Two or more prices for one item will result in bid rejection. Bidders are required to complete, sign and return the bid form and/or complete and return the associated line item pricing forms as indicated. Vendors must not alter the bid forms. Doing so will cause the bid to be rejected.

A corporate resolution or written evidence of the individual signing the bid having such authority must be submitted with the bid. Failure to comply will cause bid to be rejected. For corporate entities, such written evidence may be a printout of the Louisiana Secretary of State's website listing the signatory as an officer. Such printout shall be included with the bid submission. Bids submitted by Owners or Sole Proprietorships must include certification that he or she owns the entity for which the bid is signed. This documentation must be submitted with the bid. Failure to do so will result in bid rejection.

NOTE: A sample corporate resolution can be downloaded from our website <http://purchasing.jeffparish.net> or you may provide your own document. A sample certification of sole proprietorship can also be downloaded from our website <http://purchasing.jeffparish.net> or you may provide your own document.

### INSTRUCTIONS FOR BIDDERS AND GENERAL CONDITIONS

A. AWARD OF CONTRACT: JEFFERSON PARISH reserves the right to award contracts or place orders on a lump sum or individual item basis, or such combination, as shall in its judgment be in the best interest of JEFFERSON PARISH. Every contract or order shall be awarded to the LOWEST RESPONSIVE AND RESPONSIBLE BIDDER, taking into consideration the CONFORMITY WITH THE SPECIFICATIONS and the DELIVERY AND/OR COMPLETION DATE. SPLIT AWARDS MADE TO SEVERAL VENDORS WILL ONLY BE GRANTED TO THOSE DEEMED RESPONSIVE AND RESPONSIBLE.

All bid prices shall remain valid for 45 days. Jefferson Parish and the lowest responsive and responsible bidder(s) by mutual written consent may mutually agree to extend the deadline for award by one (1) or more extensions of thirty (30) calendar days.

PROTESTS: Only those vendors that submit bids in response to this solicitation may protest any element of the procurement, in writing to the Director of the Purchasing Department. Written protest must be received within 48 hours of the release of the bid tabulation by the Purchasing Department. After consultation, the Parish Attorney's Office will then respond to protests in writing. (For more information, please see Chapter 2, Article VII, Division 2, Sec. 2-914.1 of the Jefferson Parish Code of Ordinances.)

PREFERENCE: Unless federal funding is directly spent by Jefferson Parish for this purchase, preference is hereby given to materials, supplies, and provisions produced, manufactured or grown in Louisiana, quality being equal to articles offered by competitors outside the state. "LSA – R.S. 38:2251-2261"

B. USE OF BRAND NAMES AND STOCK NUMBERS: Where brand names and stock numbers are specified, it is for the purpose of establishing certain minimum standards of quality. Bids may be submitted for products of equal quality, provided brand names and stock numbers are specified. Complete product data may be required prior to award.

C. CANCELLATION OF CONTRACT: JEFFERSON PARISH reserves the right to cancel all or any part if not shipped promptly. No charges will be allowed for parking or cartage unless specified in quotation. The order must not be filled at a higher price than quoted. JEFFERSON PARISH reserves the right to cancel any contract at anytime and for any reason by issuing a THIRTY (30) day written notice to the contractor.

For good cause and as consideration for executing a contract with Jefferson Parish, vendor conveys, sells, assigns and transfers to Jefferson Parish or its assigns all rights, title and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of Louisiana, relating to the particular good or services purchased or acquired by Jefferson Parish.

D. PRICES: Jefferson Parish is exempt from paying sales tax under LSA-R.S. 47:301 (8)(c). All prices for purchases by Jefferson Parish of supplies and materials shall be quoted in the unit of measure specified and unless otherwise specified, shall be exclusive of state and local taxes. The price quoted for work shall be stated in figures. In the event there is a difference in unit prices and totals, the unit price shall prevail.

Quantities listed are for bidding purposes only. Actual requirements may be more or less than quantities listed.

Bidders are not to exclude from participation in, deny the benefits of, or subject to discrimination under any program or activity, any person in the United States on the grounds of race, color, national origin, or sex; nor discriminate on the basis of age under the Age Discrimination Act of 1975, or with respect to an otherwise qualified handicapped individual as provided in Section 504 of the Rehabilitation Act of 1973, or on the basis of religion, except that any exemption from such prohibition against discrimination on the basis of religion as provided in the Civil Rights Act of 1964, or Title VI and VII of the Act of April 11, 1968, shall also apply. This assurance includes compliance with the administrative requirements of the Revenue Sharing final handicapped discrimination provisions contained in Section 51.55 (c), (d), (e), and (k)(5) of the Regulations. New construction or renovation projects must comply with Section 504 of the 1973 Rehabilitation Act, as amended, in accordance with the American National Standard Institute's specifications (ANSI A17.1-1961).



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## INSTRUCTIONS FOR BIDDERS AND GENERAL CONDITIONS

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Jefferson Parish and its partners as the recipients of federal funds are fully committed to awarding a contract(s) to firm(s) that will provide high quality services and that are dedicated to diversity and to containing costs. Thus, Jefferson Parish strongly encourages the involvement of minority and/or woman-owned business enterprises (DBE's, including MBE's, WBE's and SBE's) to stimulate participation in procurement and assistance programs.

The purpose and intention of this invitation to bid is to afford all suppliers an equal opportunity to bid on all construction, maintenance, repair, operating supplies and/or equipment listed in this bid proposal. JEFFERSON PARISH WILL ACCEPT ONE BID ONLY FROM EACH VENDOR. Items bid must meet specifications.

Advertised bids will be tabulated and a copy of the tabulation will be forwarded to each responding bidder.

### IN ACCORDANCE WITH STATE REGULATIONS JEFFERSON PARISH OFFERS ELECTRONIC PROCUREMENT TO ALL VENDORS

This electronic procurement system allows vendors the convenience of reviewing and submitting bids online.

This is a secure site and authorized personnel have limited read access only. Bidders are to submit electronically using this free service; while the website accepts various file types, one single PDF file containing all appropriate and required bid documents is preferred. Bidders submitting uploaded images of bid responses are solely responsible for clarity. If uploaded images/documents are not legible, then bidder's submission will be rejected. Please note all requirements contained in this bid package for electronic bid submission.

Please visit our E-Procurement Page at [www.jeffparishbids.net](http://www.jeffparishbids.net) to register and view Jefferson Parish solicitations. For more information, please visit the Purchasing Department page at <http://purchasing.jeffparish.net>.

The general specifications for construction projects and the purchase of materials, services and/or supplies are those adopted by the JEFFERSON PARISH Council by Resolution No. 113646 or 113647 as amended. The general conditions adopted by this resolution shall be considered as much a part of this document as if they were written wholly herein. A copy may be obtained from the Office of the Parish Clerk, Suite 6700, Jefferson Parish General Government Building, 200 Derbigny Street, Gretna, LA 70053. You may also obtain a copy by visiting the Purchasing Department webpage at <http://purchasing.jeffparish.net> and clicking on Online Forms.

### ADDITIONAL REQUIREMENTS FOR THIS BID

PLEASE MATCH THE NUMBERS PRINTED IN THIS BOX WITH THE CORRESPONDING INSTRUCTIONS BELOW.

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1. All bidders must attend the MANDATORY pre-bid conference and will be required to sign in and out as evidence of attendance. In accordance with LSA R.S. 38:2212(I), all prospective bidders shall be present at the beginning of the MANDATORY pre-bid conference and shall remain in attendance for the duration of the conference. Any prospective bidder who fails to attend the conference or remain for the duration shall be prohibited from submitting a bid for the project.
2. Attendance to this pre-bid conference is optional. However, failure to attend the pre-bid conference shall not relieve the bidder of responsibility for information discussed at the conference. Furthermore, failure to attend the pre-bid conference and inspection does not relieve the successful bidder from the necessity of furnishing materials or performing any work that may be required to complete the work in accordance with the specification with no additional cost to the owner.
3. Contractor must hold current applicable JEFFERSON PARISH licenses with the Department of Inspection and Code Enforcement. Contractor shall obtain any and all permits required by the JEFFERSON PARISH Department of Inspection and Code Enforcement. The contractor shall be responsible for the payment of these permits. All permits must be obtained prior to the start of the project. Contractor must also hold any and all applicable Federal and State licenses. Contractor shall be responsible for the payment of these permits and shall obtain them prior to the start of the project.



## INSTRUCTIONS FOR BIDDERS AND GENERAL CONDITIONS

4. A LA State Contractor's License will be required in accordance with LSA R.S. 37-2150 et. seq. and such license number will be shown on the outside of the bid electronic envelope. Failure to comply will cause the bid to be rejected. When submitting the bid electronically, the license number must be entered in the appropriate field in the electronic procurement system. Failure to comply will cause the bid to be rejected.
5. It is the bidder's responsibility to visit the job site and evaluate the job before submitting a bid.
6. Job site must be clean and free of all litter and debris daily and upon completion of the contract. Passageways must be kept clean and free of material, equipment, and debris at all times. Flammable material must be removed from the job site daily because storage will not be permitted on the premises. Precaution must be exercised at all times to safeguard the welfare of JEFFERSON PARISH and the general public.
7. PUBLIC WORKS BIDS: All awards for public works in excess of \$5,000.00 will be reduced to a formal contract which shall be recorded at the contractor's expense with the Clerk of Court and Ex-Officio Recorder of Mortgages for the Parish of Jefferson. A price list of recordation costs may be obtained from the Clerk of Court and Ex-Officio Recorder of Mortgages for the Parish of Jefferson. All awards in excess of \$25,000.00 will require both a performance and a payment bond. Unless otherwise stated in the bid specifications, the performance bond requirements shall be 100% of the contract price. Unless otherwise state in the bid specifications, the payment bond requirements shall be 100% of the contract price. Both bonds shall be supplied at the signing of the contract.
8. NON-PUBLIC WORKS BIDS: A performance bond will be required for this bid. The amount of the bond will be 100% of the contract price unless otherwise indicated in the specifications. The performance bond shall be supplied at the signing of the contract.
9. NON-PUBLIC WORKS BIDS: A payment bond will be required for this bid. The amount of the bond will be 100% of the contract price unless otherwise indicated in the specifications. The payment bond shall be supplied at the signing of the contract.
10. All bidders must comply with the requirements stated in the attached "Standard Insurance Requirements" sheet attached to this bid solicitation. Failure to comply with this instruction will result in bid rejection.
11. A bid bond will be required with bid submission in the amount of 5% of the total bid, unless otherwise stated in the bid specifications. All sureties must be in original format (no copies) When submitting a bid online, vendors must submit an electronic bid bond through the respective online clearinghouse bond management system(s) as indicated in the electronic bid solicitation on Central Auction House. No scanned paper copies of any bid bond will be accepted as part of the electronic bid submission.
12. This is a requirements contract to be provided on an as needed basis. JEFFERSON PARISH makes no representations on warranties with regard to minimum guaranteed quantities unless otherwise stated in the bid specifications.
13. Freight charges should be included in total cost when quoting. If not quoted FOB DELIVERED, freight must be quoted as a separate item. Bid may be rejected if not quoted FOB DELIVERED or if freight charges are not indicated on bid form.
14. PUBLIC WORKS BIDS - Completed, Signed and Properly Notarized Affidavits Required; This applies to all solicitations for construction, alteration or demolition of public buildings or projects, in conformity with the provisions contained in LSA-RS 38:2212.9, LSA-RS 38:2212.10, LSA-RS 38:2224, and Sec 2-923.1 of the Jefferson Parish Code of Ordinances. For bidding purposes, all bidders must submit with bid submission COMPLETED, SIGNED and PROPERLY NOTARIZED Affidavits, including: Non-Conviction Affidavit, Non-Collusion Affidavit, Campaign Contribution Affidavit, Debt Disclosures Affidavit and E-Verify Affidavit. For the convenience of vendors, all affidavits have been combined into one form entitled PUBLIC WORKS BID AFFIDAVIT. This affidavit must be submitted in its original format, and without material alteration, in order to be compliant and for the bid to be considered responsive. A scanned copy of the completed, signed and properly notarized affidavit may be submitted with the bid, however, the successful bidder must submit the original affidavit in its original format and without material alteration upon contract execution. Failure to comply will result in the bid submission being rejected as non-responsive. The Parish reserves the right to award bid to the next lowest responsive and responsible bidder in this event.

## INSTRUCTIONS FOR BIDDERS AND GENERAL CONDITIONS

15. NON PUBLIC WORK BIDS - Completed, Signed and Properly Notarized Affidavits Required in conformity with the provisions contained in LSA – RS 38:2224 and Sec 2-923.1 of the Jefferson Parish Code of Ordinances. For bidding purposes, all bidders must submit with bid submission COMPLETED, SIGNED and PROPERLY NOTARIZED Affidavits, including: Non-Collusion Affidavit, Debt Disclosures Affidavit and Campaign Contribution Affidavit. For the convenience of vendors, all affidavits have been combined into one form entitled NON PUBLIC WORKS BID AFFIDAVIT. This affidavit must be submitted in its original format, and without material alteration, in order to be compliant and for the bid to be considered responsive. A scanned copy of the completed, signed and properly notarized affidavit may be submitted with the bid, however, the successful bidder must submit the original affidavit in its original format and without material alteration upon contract execution. Failure to comply will result in the bid submission being rejected as non-responsive. The Parish reserves the right to award bid to the next lowest responsive and responsible bidder in this event.

16. The ensuing contract for this bid solicitation may be eligible for FEMA reimbursement and/or Federal funding/reimbursement. As such, the referenced appendix will be applicable accordingly and shall be considered a part of the bid documents. All applicable certifications must be duly completed, signed and submitted with bid submission. Failure to submit applicable certifications with bid submission will result in bid rejection.

17. For this project, the Contractor shall not pay any state or local sales or use taxes on materials and equipment which are affixed and made part of the immovable property of the project or which is permanently incorporated in the project (hereinafter referred to as "applicable materials and equipment."). All purchases of applicable materials or equipment shall be made by the contractor on behalf of and as the agent of Jefferson Parish (Owner), a political subdivision of the State of Louisiana. No state and local sales and use taxes are owed on applicable materials and equipment under the provisions of Act 1029 of the 1991 Regular Session - Louisiana Revised Statute 47:301(8)(c). Owner will furnish to contractor a certificate form which certifies that Owner is not required to pay such state or local sales and use taxes, and contractor shall furnish a copy of such certificate to all vendors or suppliers of the applicable materials and equipment, and report to Owner the amount of taxes not incurred.

It shall be the duty of every parish officer, employee, department, agency, special district, board, and commission; and the duty of every contractor, subcontractor, and licensee of the parish, and the duty of every applicant for certification of eligibility for a parish contract or program, to cooperate with the Inspector General in any investigation, audit, inspection, performance review, or hearing pursuant to JPCO 2-155.10(19). By signing this document, every corporation, partnership, or person contracting with PARISH, whether by cooperative endeavor, intergovernmental agreement, bid, proposal, application or solicitation for a parish contract, and every application for certification of eligibility for a parish contract or program, attests that it understands and will abide by all provisions of JPCO 2-155.10.



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**BID FORM**  
Non Public Works

**All Public Work Projects are required to use the Louisiana Uniform Public Work Bid Form**

All prices must be held firm unless an escalation provision is requested in this bid. Jefferson Parish will allow one escalation during the term of the contract, which may not exceed the U.S. Bureau of Labor Statistics National Index for all Urban Consumers, unadjusted 12 month figure. The most recently published figure issued at the time an adjustment is requested will be used. A request must be made in writing by the vendor, and the escalation will only be applied to purchases made after the request is made.

Are you requesting an escalation provision?

YES \_\_\_\_\_ NO \_\_\_\_\_

MAXIMUM ESCALATION PERCENTAGE REQUESTED \_\_\_\_\_%

INITIAL BID PRICES WILL REMAIN FIRM THROUGH THE DATE OF \_\_\_\_\_.

For the purposes of comparison of bids when an escalation provision is requested, Jefferson Parish will apply the maximum escalation percentage quoted by the bidder to the period to which it is applied in the bid. The initial price and the escalation will be used to calculate the total bid price. It will be assumed, for comparison of prices only, that an equal amount of material or labor is purchased each month throughout the entire contract.

**DELIVERY: FOB JEFFERSON PARISH**

INDICATE DELIVERY DATE ON EQUIPMENT AND SUPPLIES \_\_\_\_\_

**LOUISIANA CONTRACTOR'S LICENSE NO.:** (if applicable) \_\_\_\_\_

**THIS SECTION MUST BE COMPLETED BY BIDDER:**

FIRM NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

CITY, STATE: \_\_\_\_\_ ZIP: \_\_\_\_\_

TELEPHONE: (     ) \_\_\_\_\_ FAX: (     ) \_\_\_\_\_

EMAIL ADDRESS: \_\_\_\_\_

In the event that addenda are issued with this bid, bidders MUST acknowledge all addenda on the bid form. Bidder must acknowledge receipt of an addendum on the bid form by placing the addendum number as indicated. Failure to acknowledge any addendum on the bid form will result in bid rejection.

Acknowledge Receipt of Addenda: NUMBER: \_\_\_\_\_

NUMBER: \_\_\_\_\_

NUMBER: \_\_\_\_\_

NUMBER: \_\_\_\_\_

TOTAL PRICE OF ALL BID ITEMS: \$ \_\_\_\_\_

AUTHORIZED

SIGNATURE: \_\_\_\_\_

Printed Name

TITLE: \_\_\_\_\_

SIGNING INDICATES YOU HAVE READ AND COMPLY WITH THE INSTRUCTIONS AND CONDITIONS.

**NOTE:** All bids should be returned with the BID NUMBER and BID OPENING DATE indicated on the outside of the envelope submitted to the Purchasing Department.

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## INVITATION TO BID FROM JEFFERSON PARISH - continued

BID NO.: 50-00132989

SEALED BID

ITEM NUMBER	QUANTITY	U/M	DESCRIPTION OF ARTICLES	UNIT PRICE QUOTED	TOTALS
1	3.00	EA	<p>ONE TIME PURCHASE OF THREE (3) SUBMERSI- BLE SOLIDS HANDLING SEWER PUMPS AND ONE (1) TROPLEX VFD PUMP CONTROL PANEL FOR THE JEFFERSON PARISH DEPARTMENT OF SEWERAGE</p> <p>0001 - Pump, Hydromatic SBLXP5000FB pump with 50 foot cords, 50HP, 460/3/60,</p> <p>1150 RPM explosion-proof premium efficient submersible non clog sewage pump and motor with 8 inch discharge to match the existing pumps dimensions and hydraulics.</p> <p>FOR SEWER LIFT STATION F6-4A (CLEARY &amp; I10 SOUTH SERVICE ROAD)</p>		
2	1.00	EA	<p>0002 - Tesco free standing stainless steel triplex VFD Pump control panel with power transfer breakers, Scada equipment, PLC, sunshield, battery backup, stainless steel air bells and tubing</p>		



**SPECIFICATIONS  
SUBMERSIBLE SOLIDS HANDLING SEWER PUMPS  
AND TRIPLEX VFD PUMP CONTROL PANEL  
JEFFERSON PARISH DEPT. OF SEWERAGE  
CLEARY AND I-10 SOUTH SERVICE ROAD LIFT STATION (F6-4A)**

**1.01            GENERAL**

- A. Vendors shall supply three (3) Hydromatic S8LXP5000FB submersible explosion-proof, premium efficient, solids handling pumps, and a single free-standing stainless steel triplex VFD/SCADA pump control system, or approved equals. The pumps shall be able to fit the existing rail system, utilize the existing sealing flanges, and fit into the aluminum hatches for Cleary and I-10 South Service Road Sewer Lift Station, with no modifications. The pumps must match the hydraulic performance limits listed in these specifications. The pump motors shall be NEMA Premium Efficient, and bear a stainless-steel nametag showing FM approval for Class I, Division I, explosion proof environments. Any bids submitted for pump manufacturers, other than as specified, must include in their bid all information needed to fully demonstrate complete compliance with requirements of these specifications, and dimensional duplicity of the existing pumps. The pumps on this bid shall, at Jefferson Parish's option, have a complete witnessed certified Hydraulic Institute pump test performed in the same facility that the pumps were manufactured in. This hydraulic test shall certify at least seven (7) separate operating points along its operating curve, including the duty point and shut-off, and show GPM, TDH, efficiency, and BHP at each tested point. These certified curves shall be approved by Jefferson Parish, or it's appointed agent before the pumps can be released for shipment. The bid will be awarded to the lowest responsible bidder complying with all provisions of this invitation, providing the bid is reasonable, and in the best interest of Jefferson Parish to accept. Jefferson Parish reserves the right to accept or reject the bid in whole or part, any bids that are incomplete or do not demonstrate that they are equal to the requirements of these specifications. It is the bidder's responsibility to provide adequate information necessary for the complete evaluation of their proposed equipment. Jefferson Parish shall be the sole judge as to the equality of any alternate manufacturer's offering.

**2.01            OPERATING CONDITIONS**

- A. Each pump shall be rated 50 H.P., 480 volts, 3 phase, 60 hertz, maximum 1150 R.P.M. The unit shall produce 2,300 GPM at 62 feet TDH, with a minimum pump efficiency of 79 percent, and maximum input KW of 44.1.  
The pump shall be capable of handling a minimum 4 inch spherical solid. The pump shall be non-overloading throughout the entire range of operation without employing service factor. The pump shall have an auxiliary duty point of 3400 GPM at 40 feet TDH, with a minimum 70 percent pump efficiency. The pump shall have a minimum shut off head of 118 feet. The pump motor shall reserve a minimum service factor of 1.3. The

performance curve shall show head, capacity, pump efficiency, solids handling capacity, and reflect motor service factor.

### 3.01 CONSTRUCTION

- A. The pump shall be a centrifugal, non-clog, solids handling, submersible, wastewater type; model S8LXP5000FB, as manufactured by Hydromatic Pumps, or approved equal. The pump must bear a stainless-steel manufacturer's nameplate, stating "Made in the U.S.A", or "Assembled in the U.S.A." The pump volute, motor, and seal housing shall be high quality gray cast iron, ASTM A-48, Class 30. The pump discharge shall be fitted with an 8-inch standard ASA 125-lb. flange, faced, and drilled. Slotted flange bolt holes will not be accepted. All external mating parts shall be machined and Buna N Rubber O-ring sealed on a beveled edge. Gaskets will not be accepted. All fasteners exposed to the pumped liquids shall be 300 series stainless steel.

### 3.02 ELECTRICAL POWER CORD

- A. Electrical power cord shall be 50 feet long, and made of STW-A, water resistant 600 V, 60° Celsius, UL and CSA listed, and applied dependent on amp draw for size. The pump shall have an independent sensor cord containing motor overtemp and moisture sensor wires.
- B. The pump shall be double protected with a compression fitting and epoxy potted area at the power cord entry to the pump.
- C. The power cable entry into the cord cap assembly shall first be made with a compression fitting. Each individual lead shall be stripped down to bare wire at staggered intervals, and each strand shall be individually separated. This area of the cord cap shall then be filled with an epoxy compound potting which will prevent water contamination to gain entry, even in the event of wicking or capillary attraction through the power cord.
- D. The power cord leads shall then be connected to the motor leads with extra heavy terminal block that allows for easy connection of motor leads to power cord leads.
- E. The cord cap assembly, where bolted to the connection box assembly; and the connection box assembly, where bolted to the motor housing, shall each be sealed with a Buna N Rubber O-ring on a beveled edge to assure proper sealing.



### 3.03 MOTOR

- A. The stator, rotor, and bearings shall be mounted in a sealed and oil filled submersible type housing. The stator windings shall have a minimum Class H insulation (180° Celsius or 356° Fahrenheit), NEMA B design (3-phase). Air filled designs will not be accepted. Further protection shall be provided by “on winding” thermal sensors.
- B. The pump and motor shall be specifically designed so that they may be operated partially or completely submerged in the liquid being pumped.
- C. The motor stator shall be slip fit mounted into the watertight casing. Stators must be capable of being repaired or rewound by local motor service facilities. Heat shrink motor fits will not be accepted. No special tools shall be required for pump and motor disassembly.
- D. Motor shall be equipped with integral heat sensors, one for each phase (three phase motor). The heat sensor(s) shall be a low resistance; bi-metal disc that is temperature sensitive. They shall be mounted directly on the stator windings. The sensors shall be connected in series with motor starter coil, so that the pump ceases operation when an over-temperature condition is sensed. These sensors shall be used in conjunction with and supplemented by external motor over- current protection located at the control panel. The pump shall cease operation when the overload is tripped. The overload shall be manually reset.
- E. Motors shall have a service factor of 1.3, or greater.
- F. Cable Entry: The cable entry water seal design shall be such that it precludes specific torque requirements, to ensure a watertight and submersible seal. It shall permit no entry of water into any high voltage area, even if the cable is severed below the water level.
- G. Cooling System: Each pump shall be provided with an adequately designed cooling system. Water jackets or closed loop cooling systems will not be accepted.
- H. Motors shall conform to the NEMA Premium Efficiency Electric Motor Program.  
Motors must meet or exceed the nominal energy efficiency levels listed in NEMA

standards publication MG 1-2006, tables 12-12 and 12-13.

#### 3.04 BEARINGS AND SHAFT

- A. An upper radial bearing and a lower thrust bearing shall be required. These shall be heavy-duty single row ball bearings which are permanently lubricated by the dielectric oil which fills the motor housing. Sealed grease packed bearings shall not be acceptable. Bearings that require lubrication according to a prescribed schedule shall not be acceptable. The upper radial bearing shall have a minimum B-10 life at the specified condition of 50,000 hours and the lower double row thrust bearing shall have a minimum B-10 life at the specified condition of 50,000 hours. Bearings shall be locally available.
- B. The shaft shall be machined from a solid 416 series stainless steel forging and is a design that is of large diameter with minimum overhang to reduce shaft deflection and prolong bearing life.

#### 3.05 SEALS

- A. The pump shall have two mechanical seals, mounted in tandem, with an oil chamber between the seals. Seals shall be used with the rotating seal faces being carbon and the stationary seal faces to be silicone carbide. The lower seal shall be replaceable without disassembly of the seal chamber and without the use of special tools. Pump-out vanes shall be present on the backside of the impeller to keep contaminants out of the seal area. Units that require the use of foreign manufactured seals will not be accepted. Seals shall be locally available.
- B. The pump shall be equipped with a seal leak detection probe and warning system. This shall be designed to alert maintenance personnel of lower seal failure, without having to take the unit out of service for inspection; or requiring access for checking seal chamber oil level and consistency.
- C. There shall be an electric probe or seal failure sensor installed in the seal chamber between the two tandem mechanical seals. The seal fail circuit must utilize a probe that has no moving parts. If the lower seal fails, contaminants which enter the seal chamber shall be detected by the sensor and send a signal to operate the specified warning device.
- D. Units equipped with opposed mechanical seals will not be accepted.



### 3.06 IMPELLER

- A. Impeller shall be of the two-vane, enclosed non-clogging design and have pump-out vanes on the front and backside of the impeller to prevent grit and other materials from collecting in the seal area. Single vane design impellers which cannot be easily trimmed, do not maintain balance with wear causing shaft deflections, and reduce seal and bearing life will not be accepted. Impeller shall not require coating. Because most impeller coatings do not remain beyond the very early life of the impeller, efficiency and other performance data submitted shall be based on performance with an uncoated impeller. Attempts to improve efficiency by coating impeller will not be accepted. The impeller shall be manufactured from ductile iron ASTM A-536 material.
- B. Impellers shall be dynamically balanced. The tolerance values shall be listed according to the International Standard Organization grade 6.3 for rotors in rigid frames. The tolerance is to be split equally between the two balance planes, which are the two impeller shrouds.
- C. The impeller shall be slip fit to a tapered shaft and key driven. A 300 series stainless steel washer and impeller bolt shall be used to fasten the impeller to the shaft. Straight end or threaded shafts for attachment of the impeller will not be accepted.

### 3.07 CASING

- A. The casing shall be of the end suction volute type, having sufficient strength and thickness to withstand all stress and strain from service at full operating pressure and load. The casing shall be of the centerline horizontal discharge type. The design shall be such that the pumps will be automatically connected to the discharge piping when lowered into position with the guide rails. The casing shall be accurately machined and bored for register fits with the suction and casing covers.
- B. A volute case wearing ring shall be provided to minimize impeller wear. The wear ring shall be 300 series stainless steel or bronze ASTM # B584-932, and held by 300 series stainless steel fasteners. The wear ring shall be easily replaceable in the field. Wear rings of any other material will not be accepted.

### 3.08 PAINTING

- A. After assembly and testing, each pump shall be painted with a dark green water reducible air-dry enamel. The paint shall be applied in one coat, covering all exterior surfaces. The pump shall be air dried after testing and before painting.

### 3.09 SERVICEABILITY

- A. The complete rotating assembly shall be capable of being removed from the volute without disturbing discharge piping or volute. The motor housing, seal housing, with seal plate and impeller still attached to the shaft, shall be capable of being lifted out of the volute case from the top as one assembly.

### 3.10 SUPPORT

- A. Though the pump may not require feet to support the unit while installed, the pump volute must have feet to support the unit when removed for service. Units which do not have feet upon which the unit can be supported when removed for service will not be accepted.

### 4.01 TESTING

- A. Commercial testing shall be required and include the following:
  - 1. The pump shall be visually inspected to confirm that it is built in accordance with the specifications as to HP, voltage, phase, and hertz.
  - 2. The stator motor leads shall be tested for integrity using a meg-ohm meter at the highest setting.
  - 3. Pump shall be allowed to run dry to check for proper rotation.
- 4. Discharge piping shall be attached, the pump submerged in water, and amp readings shall be taken in each leg to check for an imbalanced stator winding. If there is a significant difference in readings, the stator windings shall be checked with a bridge to determine if an unbalanced resistance exists. If so, the stator shall be replaced. The pump test facility shall be located in the same plant that the pump was assembled and shall be capable of providing certified Hydraulic Institute level test reports.
- 5. The pump shall be removed from the water, meg-ohm meter tested again, dried, and the motor housing filled with dielectric oil.



## 5.01 PUMP WARRANTY PERIOD AND SERVICE REQUIREMENTS

- A. The pump bidder must be listed as a factory authorized service center for the brand they are bidding, and be capable of completely servicing the proposed pumps within one (1) hour of the project site. The pump bidder must own and operate a direct factory service center and stocking facility capable of completely servicing and supplying spare parts for the proposed pumps within one (1) hour of the project site. The bidder's factory service center/stocking facility shall be available for Jefferson Parish inspection on a twenty-four (24) hour prior notice. The bidders service center must have full time, factory trained mechanics capable of, and certified to service the equipment being offered.
- B. The pump manufacturer shall provide a written prorated warranty for the units supplied against defects in material and workmanship for a period of at least five (5) years or 10,000 operating hours, under the operating conditions specified, in accordance with their standard published Municipal Pump Warranty. Pump manufacturer shall demonstrate ability to support claimed warranty coverage by meeting all requirements of the specifications, and performance required by the pumps.

## **TRIPLEX FREE STANDING STAINLESS STEEL VFD PUMP CONTROL PANEL**

### **PART I: SUBMITTAL REQUIREMENTS**

#### **1.01 Submittals**

The Pump Control Panel manufacturer shall provide the following documents upon delivery:

- Bills of Material
- Elevation and Base Plan drawings
- Wiring diagrams
- Catalog cut-sheets
- Pump Control Panel heat calculations
- Certified Factory Test results
- Spare parts list
- 10-year Warranty for Programmable Pump Controller and printed circuit boards
- 10-year warranty for Reactive Air™ Level Monitoring System compressor
- 1-year warranty for all electrical components, from date of lift station commissioning
- Certification that all printed circuit boards have conformal coating
- Certification the Programmable Pump Controller and all printed circuit boards have passed a 5-day burn-in test. Testing requirements are as noted in the PPC hardware specification
- CSIA certification

### **PART II: MATERIALS**

#### **2.01 Pump Control Panel**

##### **A. General Requirements**

Furnish all equipment in a low profile, U.L. 508 listed, weatherproof (NEMA 3RX), 316 stainless steel (dull finish) panel with rain tight cap, sealed bottom, and 8-inch leg stands. The pump control panel and pumps shall be furnished together as a single offering, in order to assure proper coordination and complete system responsibility. The Pump Control Panel shall be as manufactured by Tesco Controls Inc., or approved equal. Along with exterior doors, the Pump Control Panel enclosure shall be furnished with hinged interior dead-front doors. Outer enclosure shall be constructed of 12-gauge, 316 stainless steel (dull finish to reduce glare). A custom weather shield shall be provided to protect Parish personnel from falling rain and other weather-related environments. Doors shall be equipped with 316-stainless steel polished handles, with 3-point roller bearing latches, and hasps for owner padlocks. Doors shall be hinged on the same side and shall open to greater than 90 degrees. All doors (exterior and interior) shall also be furnished with 316 stainless steel metal doorstops for use in windy conditions. All dead-front latches shall be 1/4 turn adjustable, with 1/8-inch-thick latching dog, and knurled knob. All interior mounting hardware shall be stainless steel. Enclosure exterior shall be unpainted stainless steel, dull finish (to prevent glare from passing car headlights). Interior color,



including front and back of all hinged dead front doors, separation barriers, and mounting back pans shall be white. The painting process shall include five stages of metal preparation using dip tanks as follows: 1) Alkaline cleaner, 2) Clear water rinse, 3) Iron phosphate application, 4) Clear water rinse, and 5) Inhibitive rinse to seal phosphated surfaces. Finish shall be polyester dry powder, electrostatically applied, and baked on at 400 degrees Fahrenheit for a minimum of 15 minutes.

The enclosure shall be compartmentalized such that the Programmable Pump Controller/telemetry section shall be isolated from the power sections. The compartments containing the Programmable Pump Controller/telemetry components shall be separated from the power sections by barriers behind the inner dead front doors. If required, space shall be available in the Pump Control Panel for the mounting of existing or new telemetry components (radio/modem, battery, and charger). All openings shall be sealed to prevent entrance of insects and rodents.

The Pump Control Panel shall house the main/utility circuit breaker, and backup generator receptacle circuit breaker with approved mechanical interlock to prevent both breakers from being closed concurrently. The main circuit breaker, generator circuit breaker, and all wiring shall be located behind an interior dead front door. Interlocks and circuit breaker operation shall be possible without opening the dead front door. Elapsed time meters, indicating devices and H.O.A. switches, shall be mounted on the inside dead front door. Breaker cutouts for breaker toggle protrusion shall be supplied, to eliminate exposure to hazardous potentials. A physical lockout device shall be supplied on each motor circuit breaker. The control panel shall be thermostatically controlled by heating and cooling systems - without the use of an air conditioner - to maintain suitable climate conditions within the control panel. Lightning/surge protection and PFR power fail relay shall be furnished to protect the panel equipment from lightning, loss of power, or utility power surges. GFCI receptacle, intrusion switch and fluorescent light with door activated switch in each panel section shall be provided. A site area light switch with associated circuit breaker protection shall be provided. All bussing and wire shall be copper. All wire shall be stranded with locking spade pressure connectors and labeled with clip-on permanent plastic wire markers. All circuit breakers and dead-front mounted devices (lights and switches) shall be equipped with custom engraved phenolic nameplates.

#### B. Utility Metering

The electric service meter compartment shall be constructed as an integral part of the Pump Control Panel. Metering shall meet all requirements of, and be approved by the local utility company. Metering compartment shall be U.L. labeled as suitable for use as service equipment only. A lever operated meter socket to meet local utility requirements shall be furnished. The pull section and utility compartments shall be accessible only by the local utility company. The pull section shall include circuit breaker disconnect and neutral landing lug, per local utility requirements. All bussing and wire shall be copper.

#### C. Generator Connection

The generator cable entrance shall be a 3-inch PVC nipple conduit and 45-degree angled PVC pass through, with threaded cover attached by an appropriate stainless-steel chain; and shall be provided as a generator wire access point. The access nipple shall be located on the side of the panel near the Emergency breaker. The nipple location shall meet all NEC clearance requirements. The Emergency breaker shall have lugs for generator wire connection.

#### D. Terminal and Distribution Blocks

Distribution blocks shall be furnished and installed as required for "fan-out" of control power and other 120V sources within the enclosure. The blocks shall be rated 300V at a minimum of 20 amperes and sized for the conductors served. Distribution blocks shall be Marathon, or approved equal.

#### E. Circuit Breakers

All 480-volt circuit breakers shall have minimum interrupting capacities at 35,000 amperes. All 120-volt breakers shall be minimally rated at 4,000 amperes interrupting capacity. Circuit breakers shall be of the indicating type, providing ON, OFF, and TRIPPED positions of the operating handle. Circuit breakers shall be quick-make, quick-break, with a thermal-magnetic action, except when protecting motor feeders where motor circuit protector (MCP) breakers may be used. Circuit breakers shall be the bolted-on type. The use of tandem or dual circuit breakers in a normal single-pole space to provide the number of poles or spaces specified will not be accepted. All multiple-pole circuit breakers shall be designed so that an overload on one pole automatically causes all poles to open. Circuit breakers shall meet the requirements of UL and NEMA AB I. Breakers shall be Cutler Hammer HMCP, QC, or approved equal. All circuit breakers shall be heavy duty molded case circuit breakers, conforming to Federal specification W-C-375B, and shall be UL listed.



#### F. Motor Control – Variable Frequency Drives

Each motor shall be provided with a suitable controller and devices that will perform the functions specified for their respective motors. Controllers shall conform to the applicable requirements of NEMA ICS, ANSI C19.1, the NEC, and UL. Anticipated horsepower ratings are as specified in section 2.01. This information is for guidance only and does not limit the equipment size. When motors furnished differ from the expected ratings indicated, the necessary adjustments to wiring, conduit, disconnect devices, VFDs, branch circuit protection, and other affected material or equipment shall be made, to accommodate the motors actually installed, at no additional cost to Jefferson Parish.

Each motor control system shall be equipped with a hand-off-auto control switch, indicating lights, elapsed time meter, motor starter, and 3-phase pump current monitoring. Control switches and indicating lights shall be U.L. listed oil-tight devices, rated heavy duty, provided by Allen Bradley, or approved equal. Elapsed running time meter for recording total elapsed running time for each motor shall be six-digit, non-reset, recording in hours and tenths. Meters shall be mounted to dead front door with stainless steel machine screws. Sheet metal screws will not be accepted.

A Variable Frequency Drive shall be provided for each pump in the system, sized for the appropriate voltage and power. The VFD unit shall be 6 pulse width modulated (PWM) type. The unit(s) shall be supplied by the System Supplier, and designed for wastewater pumping.

#### G. Nameplates

Nameplates shall be black phenolic with custom white lettering. Nameplates shall be stainless steel screw mounted. Sheet metal screws or glue types will not be accepted.

#### H. Control Power Transformer

Transformer shall be furnished with primary and secondary fusing. Transformer shall be encapsulated with electrical grade epoxy and silica sand to completely seal the core and coils from moisture and contaminants. Transformer shall be designed for quiet operation, 180 degrees Celsius insulation system standard, with 115 degrees Celsius temperature rise for longer, more reliable life. Transformer shall be made in U.S.A. and meet or exceed all applicable NEMA, ANSI, OSHA, UL, and CSA requirements.

#### I. Panelboard

Panelboard shall be circuit breaker type custom constructed to utilize minimum enclosure space with breakers as shown. Circuit breakers shall be bolted on type. The panelboard shall be furnished with custom phenolic nameplates. The panelboard transformer shall be dry type construction sized, with primary breaker protection. The panelboard transformer shall be a Jefferson 411, or approved equal.

#### J. Panel Lights

Push-to-test lights to indicate status and alarm conditions locally shall be furnished. Custom engraved phenolic nameplates shall specify each light's function. Lights shall be wired as specified. Panel lights shall be full voltage Allen Bradley 800H series, or approved equal.

#### K. Push-buttons and Selector Switches

Push-buttons and selector switches shall be furnished. Custom engraved phenolic nameplates shall specify each switches function. Switches shall be wired as specified. Switches shall be full voltage Allen Bradley 800H series, or approved equal.



L. Receptacles, Duplex

Receptacles shall be of specification grade and of NEMA configuration and rated 2 pole, 3 wire grounding, 20 amperes, 125 volts, such as Hubbell, or approved equal. Bases shall be of ivory phenolic composition. Wire terminals shall be suitable for 10 AWG wire and shall be screw type. Receptacles shall be U.L. listed. The receptacles shall have corrosion resistant conducting parts of nickel-plated brass and other metal parts of stainless steel. All external and dead front receptacles shall be installed on ground fault interrupter circuits "GFCI".

M. Relays, Control

Control relays shall be Idec Type RR, or approved equal. Two form-C contacts (minimum) shall be provided on each relay. In addition, relay energized neon lamp (inside relay case) shall be provided.

N. Relays, Power Fail

The power fail relay shall continuously monitor the three phases for power loss, low voltage, phase loss, phase reversal and have automatic reset. The power fail monitor shall have a drop-out voltage adjustment and a failure indicating LED. The power fail relay shall be by Diversified Electronics SLA series, or approved equal.

O. Relays, Float Switch Interface (If Required)

Float interface relays shall be provided for required functions. The units shall be specifically designed for monitoring intrinsically safe circuits. The unit shall utilize low current (120 micro amps maximum) and low voltage (12 volts d-c maximum), limiting the power entering the hazardous area to less than 1.5 milli-watts. Unit sensitivity shall allow pick-up on circuit closures of 100 K ohms or less. The float switch interface relays shall be TESCO 72-144, or approved equal.

P. Relays, Time Delay

Time delay relays shall be solid state relays with a timer adjustable over the range 1 to 60 seconds, unless other ranges are indicated or required. A LED relay energized indicator lamp shall be provided. Time delay relays shall be Idec RTE, or approved equal.

Q. Relays, Pump Moisture Sensing

Pump moisture sensing relays shall be provided for submersible pumps. The units shall be specifically designed for monitoring conductive circuits. The unit shall utilize low current (120 micro amps maximum) and low voltage (12 volts d-c maximum). Unit sensitivity shall allow pick-

up on circuit closures of 100 K ohms or less. The pump moisture sensing relays shall be TESCO 72-144 or, approved equal.

## 2.02 Programmable Pump Controller (PPC)

### A. General Requirements

The Programmable Pump Controller shall have all the characteristics and features listed herein. All sites shall be similar in nature, (operator interface, configuration and options, back pan layout, etc., except for I/O count), so all RTUs can be interchangeable with one another. The use of any third-party hardware or software add-on products to meet this specification will not be accepted. The controller shall be an L3000™ Programmable Pump Controller from TESCO Controls, Inc., Sacramento, CA, or approved equal.

### B. Manufacturer

The Programmable Pump Controller shall be procured from a manufacturer that has experience manufacturing Programmable Pump Controllers designed specifically for the wastewater industry. The PPC itself and support for the controller shall be available directly from the manufacturer. Programming services shall be available direct from the manufacturer as a normal practice.

### C. Warranty

The manufacturer shall provide a factory-standard 10-year warranty with the unit. The replacement controller shall be available within 24 hours, installed and running at the station, without requiring that the original unit first be removed and returned to the factory.

### D. Support

The manufacturer shall provide 24/7/365 support for questions related to any aspect of the controller, including general use, application-specific issues, programming, and use of the programming software. This support shall be available directly from the manufacturer at no extra charge with the purchase of a controller. The manufacturer must also support a Spare in The Air Program™, which will expedite parts or a new controller unit by the next day.

### E. Construction

The Programmable Controller must be constructed using a card cage architecture incorporating a 96 pin 3U DIN VME standard backplane interconnection. The printed circuit cards shall be designed to slide into the card rack and interconnect with the VME backplane. A high density I/O card with a mix of I/O types as well as an I/O card for each individual I/O type shall be available. The system shall operate with a minimum of 2 cards and shall be easily expandable to

20 cards. All field wiring to the I/O cards shall be done at externally mounted terminal blocks with ribbon cable interconnects to the relative I/O card.

1) Operating Conditions

The Programmable Controller shall operate correctly under an ambient temperature range of -40 to +185 degrees Fahrenheit, without requiring forced air or other special cooling measures. Coatings on connectors, component leads, and other materials used in the construction of the Programmable Pump Controller shall be substantially resistant to atmospheres containing significant amounts of Hydrogen Sulfide gas and Chlorine gas.

2) Other

The Programmable Pump Controller shall have a low-power shut-down mode suitable for use in solar or other sites where power consumption is critical. The Programmable Pump Controller shall be provided with a complete operations and maintenance manual. At minimum, each Programmable Pump Controller shall be subjected by the manufacturer to a 5 day burn-in procedure at 165 degrees Fahrenheit.

F. Card Architecture

1) Processor Card

The Programmable Pump Controller shall be microcontroller-based, using a microcontroller that, at minimum, supports the following:

- a. 1GHz clock rate
- b. 512Mbytes RAM
- c. 64Gbytes secure digital Flash
- e. Watchdog timer
- f. 4 configurable timers with interrupt capability
- g. 3 serial ports with separate baudrate generators
- h. 1 10/100Mbps Ethernet port
- i. 4 USB 2.0 ports
- j. 1 HDMI Video port
- k. Write-protect enable/disable

The Programmable Pump Controller shall use a real-time, preemptive, multitasking operating system, contained in Flash memory. The Flash memory shall also contain



all firmware that is not specific to a particular job or application, such as operator interface and communications firmware.

## 2) Input/Output Characteristics

The Programmable Pump Controller shall provide built-in digital filtering of analog inputs. The filter constants shall be adjustable from the keyboard and through the communications ports.

## G. Field Wiring Terminal Blocks

The terminal blocks shall support the following listed characteristics:

- pull-apart two-piece wiring blocks for fast and easy wiring/re-wiring
- separate wiring blocks for each I/O type and each wire point fully labeled
- versatile internal or external analog power source
- digital outputs have LED "ON" indicators and socketed 10A relays
- entire terminal block shall snap on/off standard track mount
- onboard passive circuit protection to protect programmable controller shall be available with a built-in isolated current loop power supply, powered from the 12V DC main power. The current loop power supply shall be capable of producing at least 24V DC and 161 mA.
- three levels of lightning/surge protection

## H. Power Supply

The Programmable Pump Controller shall be powered by a 12V/5V DC power supply, with an allowed operating range of at least +/- 10 percent. A 12V battery backup of the 12V DC shall be available such that the 5V DC is also maintained by the 12V battery.

## I. Operator Interface Unit

The Programmable Pump Controller shall be available with an operator interface that is an integral part of the unit. The same operator interface shall be remotely mountable.

### 1) Keyboard

The Programmable Pump Controller shall be available with either a minimal keyboard, containing no more than 4 keys, or a full 32 keyboard with keys for direct access to functions. The keyboard construction shall be sealed membrane type, using a stainless-steel backing plate, and shall be impervious to wash-down environments and atmospheres containing Hydrogen Sulfide and Chlorine gases. The keys shall provide tactile feedback. Both keyboard options shall provide a menu-based operator interface, allowing the operator to perform at least these functions, without process interruption:

- a) Examine and change setpoints

- b) Examine analog input and output registers
- c) Examine and change timers and counters
- d) Examine and change analog input filter constants
- e) Calibrate analog inputs and outputs
- f) Force digital outputs on and off
- g) Override analog inputs and outputs
- h) Examine control program

## 2) LED Character Display

The Programmable Pump Controller shall be available with an alphanumeric LED display capable of displaying at least 8 characters at a time, using at least 15 segments per character. The LED character display shall be used for showing the values of registers, inputs, outputs and other data.

## 3) LED Annunciators

The Programmable Pump Controller shall be available with at least 380 individual LED's arranged in columns, which shall be usable to display the on/off state of digital inputs and outputs (physical or internal). The LED's shall also be usable for bar graph displays.

## 4) Mode LED's

The Programmable Pump Controller shall be equipped with at least the following mode display LED's:

- SBY - lighted when in standby mode
- CMD - lighted when in command mode
- RUN - lighted when in run mode
- MEM - lighted when write-protected memory is open
- CAL - lighted when in calibration mode
- XMT - lighted when a message is being transmitted via a communications port
- RCV - lighted when a message is received via a communications port
- ERR - lighted when an error condition is detected by the controller

The XMT/RCV LED's shall be configurable to selectively show activity on any combination of the communications ports.

## 5) Bar Graph Displays

The Programmable Pump Controller shall have the ability to display at least 4 bar graphs on the LED annunciators. The bar graphs shall be individually configurable. If the value being monitored by the bar graph should go beyond the defined endpoints (under range or over range), the LED at that end of the bar graph shall flash to indicate the condition.

6) Color Touch Screen OIT

The PPC shall have the ability to communicate Modbus to other OIT's through the Ethernet port.

7) HDMI Touch Screen

The PPC shall have the ability to interface to a HDMI OIT using the HDMI port. The HDMI Touch Screen must be rated at least with a NEMA 3 rating or better.

8) Operating Modes

The Programmable Pump Controller shall have two basic modes of operation as described below:

a) RUN:

- Actively controlling, running application-specific control program
- Sensing input signals
- Generating outputs under program control
- Peer-to-peer message initiation is enabled
- Polling is enabled



- b) STANDBY:
  - Not actively controlling
  - Continues to sense input signals
  - Analog outputs held at current level or set to zero
  - Digital outputs go to off state
  - Initiation of peer-to-peer messages is disabled
  - Polling is disabled

## J. Programming

### 1) Language

The Programmable Pump Controller shall be programmable using the ability to execute a higher-level BASIC-like programming language which is native to the controller. The Programmable Pump Controller must also support IEC 61131-3 for additional programming languages.

### 2) Registers

The Programmable Pump Controller shall have at least the following preformatted register types arranged in a global system database, with the quantity of each register type selectable to at least the numbers given:

- a) Setpoint (for storing constants, at least 1000)
- b) Analog input (physical or internal, at least 1000 total)
- c) Analog output (physical or internal, at least 1000 total)
- d) Digital input (physical or internal, at least 1000 total)
- e) Digital output (physical, at least 128)
- f) Index (for indirection and general-purpose use, at least 1000)
- g) Timer/counter (at least 1000 total)
- h) Seconds timer (times in seconds with 10 mS or better resolution, up to 497 days)
- i) Hours timer (times in hours with 2 second or better resolution, up to 272 years)
- j) HMS timer (hours, minutes, seconds format, with 0.5 second or better resolution, up to 68 years)
- k) Event counter (integer value register supporting increment/decrement, range 0 - 4,294,967,295)

The Programmable Pump Controller shall support a pulse counting frequency of at least 1 kHz on a single input.

### 3) PID Function

The Programmable Pump Controller shall provide built-in PID (Proportional/Integral/Derivative) control without requiring any procedural programming or subroutine writing. The Programmable Pump Controller shall

support the ability to simultaneously execute at least 16 independent PID control loops.

K. Configuration

The Programmable Pump Controller shall be configurable via a configuration table, which shall be changeable both by downloading through a communication port and through the full and limited keyboards. The configuration table shall allow the operator to change virtually all significant operating parameters of the system.

#### L. Web Server

The Programmable Pump Controller shall include an integrated web server for secured remote customized visualization of process data including a web server disable feature if not desired. The web server must be able to store all types of documentation and values, and all information must be available using a web browser. The web server must have colorful well designed screens that clearly show data in real time. The web server must also be able to email alarm notifications to operators and facilities.

#### M. Communications

The Programmable Pump Controller shall have the ability to simultaneously support at least 3 serial communication ports 1 Ethernet/IEEE 802.3 RJ45 port. Any of these serial ports shall be usable for both communications of telemetry data and control program/configuration upload/download, and support baud rates of 230,400 bps or higher. The ports shall be configurable to support the following media:

- Full handshake RS-232 (at least 3 ports must be configurable this way)

In addition to the three (3) RS-232 serial ports, the Programmable Pump Controller shall have one (1) Ethernet port, for a total of four (4) communications channels. All four (4) communications channels shall have the capabilities of independent operation. Each channel shall have the following capabilities:

- Poll/Response
- Quiescent (Unsolicited)
- Master Polling
- Message Store and Forward
- Automatic Port Escalation with Recovery
- Message Retries
- Communication Statistics and Diagnostics

The Programmable Pump Controller design shall incorporate Ethernet design using 100BASE-T interface and TCP/IP industry standard network protocol with the following features:

- Redundant hot-standby Ethernet (Primary Network and Secondary Fail Over Communications)
- Standard 100BaseT Interface (100Mbps data transmission, over twisted-pair cable with RJ45 connectors)
- Complies to IEEE 802.3 Specifications (Local Area Networks or Wide Area Networks)



- Separate LED Line Status Indicators (Each port to confirm Frame Transmit, Receive, Link, Collision, and Interference)
- Individual IP Configuration (Multi Network Configurations)
- Built-in PING Response (Test connectivity and verification of IP Address)
- Multi-Protocol Support (Modbus TCP/Modbus Serial, Data Express, Data Express Plus)
- Telemetry Message Routing (Communicate across all channels, i.e. RS232 to Ethernet and Ethernet to RS232)

The Programmable Pump Controller must also have USB ports to support uploading/downloading of programs, external USB Drives and the ability to configure ports for additional communications channels.

#### 1) Protocols

The Programmable Pump Controller shall implement the Ethernet/IEEE 802.3 protocol. When the PPC wishes to transmit, it will check for activity on the LAN. When the LAN becomes silent for a specified period, the PPC will begin transmission. During transmission, the PPC will continually check for a collision on the LAN. If a collision is detected, the Programmable Controller will cease transmission. The Programmable Pump Controller will then wait a random period of time before attempting to transmit again.

The Programmable Pump Controller shall support serial communications using at least 3 different protocols. The de facto standard ModBus protocol shall be supported. These protocols shall be able to coexist simultaneously on the same port. The Programmable Pump Controller shall support poll/response, polling master, quiescent, report-by-exception, and message routing communications, as described in the following sections. Any of these communications modes shall be usable alone or simultaneously in any combination.

#### 2) Polled Slave Communications

The Programmable Pump Controller shall respond as a slave unit in response to polling messages from a master SCADA system or other unit. In this mode the Programmable Pump Controller shall only respond to requests for data and not initiate messages on its own.

#### 3) Polling Master Communications

The Programmable Pump Controller shall initiate polls as a master unit and wait for the response from the slave device.

#### 4) Quiescent Communications

Using quiescent (peer-to-peer) communications, the Programmable Pump Controller shall provide the ability to initiate messages transmitting register values under operator definable conditions.

5) Report by Exception Communications

The Programmable Pump Controller shall support a means of report-by-exception communications, where only those registers of interest that have changed since the last reporting are transmitted.

6) Message Routing

The Programmable Pump Controller shall provide the ability to route received messages that are destined for another unit. The routed message can be received and sent in any combination of communication ports and physical media.

7) Failure Recovery

The Programmable Pump Controller shall have the ability to switch to alternate communications paths in the event of failure of the primary path. There shall be no practical limit on the number of different paths that the Programmable Controller may try in order to deliver the information.

8) Redundant Message Elimination

The Programmable Pump Controller shall automatically provide redundant message elimination when peer-to-peer and polled communications are used in combination.

9) Other

The Programmable Pump Controller shall provide a means of enabling/disabling quiescent/polling master message initiation from the keyboard.

N. Engineering Unit Representation

The Programmable Pump Controller shall have the capability to represent all analog input and analog output values directly in engineering units. Engineering units are defined to be "real world" IEEE 754 standard floating-point numbers corresponding to physical measurements, such as level, pressure, depth, and flow. Telemetry communications shall use engineering unit representation in all messages.

O. Calibration and Multipoint Calibration

A simple menu-driven procedure shall be provided that allows the operator to calibrate an analog input or output to an engineering unit measurement scale. This procedure shall be usable from both the full and minimal keyboards. The calibration information shall be uploadable and downloadable via a communication port.

P. Single and Multi-Point Test Override

The Programmable Pump Controller shall provide the ability to override I/O and register values for test and other purposes. When in override, the operator shall be able to control the register (set any value or on/off state) independent of the control program or physical input. The value seen by the control program shall be the override value. The operator shall also be able to release all override points at once. When any register is in override, there shall be a visible indication to the operator, regardless of what mode the Programmable Pump Controller is in.

Q. Alarms

The Programmable Pump Controller shall provide alarm flags to be used to indicate application-specific alarm conditions. The Programmable Pump Controller shall provide a common alarm digital output, that can be configured to be any digital output and can be displayed anywhere on the LED annunciators.

R. Fault Tolerance and Reliability Features

1) Event Logging

The Programmable Pump Controller shall provide a mechanism that reports and logs unusual events and items of interest. The Programmable Pump Controller shall also support viewing of the RAM event log data by transmission via the serial port.

2) Fault Relay

The Programmable Pump Controller shall contain a normally closed fault relay that under normal operation shall be energized by the Programmable Controller to indicate a non-fault state. The fault relay shall go to a fault condition (non-energized) under the following circumstances:

- 12 V DC power failure
- Memory error or other internal operating error

3) Power Up Self-Test

The Programmable Pump Controller shall perform a brief self-test upon application of power, including:



- ROM checksum
- RAM write-protection circuit check
- Write-protected RAM CRC check

4) On Going Self -Test

During normal operation (run or standby modes) the Programmable Controller shall run an ongoing self-test process. The frequency with which the ongoing self-test performs these checks shall be configurable by the operator.

5) Diagnostic Functions

The Programmable Pump Controller shall have the capability to perform self-test diagnostic functions under operator control to verify the integrity of the RAM and ROM inside the unit.

6) Activity Monitoring

The Programmable Pump Controller shall provide a mechanism for selectively viewing activity of certain integral subsystems. Text messages indicating activity shall be directable under operator control to the LED or a communication port.

7) Power Fail/Brownout Detector

The Programmable Pump Controller shall have an integral hardware device that detects a brownout or imminent power fail condition. Upon detection of the 12V DC power supply voltage dropping below an adjustable threshold, this device shall generate an immediate interrupt signal to the microcontroller.

8) Watchdog Timer

The Programmable Pump Controller shall contain a hardware watchdog timer circuit that will reset the microcontroller within 1 second of detecting a firmware failure.

9) Security

The Programmable Pump Controller shall be capable of being configured to require password entry before access to functions that would change the control characteristics or basic operating mode (run/standby) of the Programmable Pump Controller. Multiple passwords shall be supported, with at least 100 allowed. If the operator does not operate the keyboard within a selectable time period, the Programmable Pump Controller shall log him out automatically. The Programmable Controller shall also support uploading and downloading of password configuration information via the communications ports.

10) Data Archiving

The Programmable Pump Controller shall provide a means of archiving I/O and register values into storage arrays. The Programmable Pump Controller shall also provide direct read access through any communications port to the contents of each data archive. Each sample shall consist of a date and time stamp, and the register value. The Programmable Pump Controller shall also provide functions available through the communications port that allow an external SCADA or other system to reset specific archives and obtain other necessary information about the data archives in use.

11) Remote Control

The Programmable Pump Controller shall have the ability to remotely control other controllers of the same make, using any of the communication ports. The operator shall be able to perform at least the following functions on the remote unit by using the local keyboard:

- Examine and change setpoints
- Examine analog input and output registers
- Examine and change timers and counters
- Force digital outputs on and off
- Override analog inputs and outputs
- Change operating mode between Run and Standby

#### S. Programming Software

##### 1) General

A free copy of the necessary programming software shall be provided with each Programmable Pump Controller purchased. The software shall be produced, provided, and supported directly by the Programmable Pump Controller manufacturer. No third-party tools will be accepted.



2) Quick Load Software

A fast and easy to use software program shall be available free of charge to Upload and Download from a laptop computer to the controller all calibration points, setpoints, and control programming. A complete user's manual shall be provided which describes the use of all programming software. The latest version of TESCO's Win Bench™ programming software shall be used.

3) OPC Communications Server Software

OPC (OLE for Process Control) communications server program shall be available to poll the programmable controller and serve real-time data values to any OPC compliant client, such as spreadsheets, databases, and SCADA systems. This software shall operate on a computer and shall poll the controller through any maintenance port to gather real-time data of any type and number. Also, the program shall operate remotely to poll for any real-time data in the controller. The program shall have the ability to operate in a multipoint controller environment, up to 100 controllers, with full hardware handshaking to the communications media. The program shall have the ability to display all telemetry message transactions for the communications port; and shall utilize protocol disciplines such as retries, communication failures, and automatic communication recovery methods.

T. Pump Controller I/O Configuration

Analog inputs: Inputs shall be provided for wet well level and individual pump current monitoring. A selector switch shall be provided for each pump to indicate pump current for each phase. As a minimum, a total of 6 analog inputs shall be provided. All inputs are 4-20 mADC.

Analog outputs: 2 outputs shall be furnished for future use.

Digital Inputs: Inputs shall be provided for primary station power (three phase) failure, DC power failure, alarm acknowledge, high head discharge pressure, panel intrusion, pump hand and auto seal failure, and overtemperature for each pump. As a minimum, a total of 16 digital inputs shall be provided.

Digital Outputs: 115 VAC triac outputs shall be provided for the common alarm flashing beacon, the bubbler purge compressor, the bubbler purge solenoid valve, and each pump motor starter call, and each pump fail. As a minimum, 8 - triac outputs shall be furnished. Alarm LED driver outputs shall be furnished for high and low wet well alarm, high ball float alarm, level transducer fail, and communications fail. As a minimum, 8 LED driver outputs shall be furnished.

#### U. Pump Controller Functions

Pump Level Control and Alarms: Start and stop of the lift station pumps shall be controlled by the level in the wet well. There shall be an individually adjustable starter setpoint for each pump and a single stop setpoint. The pump start sequence shall be automatically alternated, with alternation on a first on/first off, first off/first on basis. If a pump fails to start, the next pump in sequence is started. High and low wet well alarms and transducer out of range alarms shall also be furnished.

Pump Run and Fail: When a pump is called to run, either through the local hand switch or automatic pump control, a pump run signal shall be generated. If flow is not sensed within an adjustable time period, a pump fail alarm shall be generated.

Bubbler Purge: The Controller shall automatically purge the reactive bell at an operator adjustable time and duration intervals. A manual purge push-button shall be installed to provide the operator capability to manually purge the level monitoring system. Bubbler compressor shall be furnished with a written 10-year warranty.

Common Alarm: The Controller shall activate the common alarm beacon on occurrence of alarms.

### 2.03 Radio System

A. General: The radio shall be furnished/installed in the pump control panel and connected to the pump controller communications output port. The existing Jefferson Parish SCADA radio system operates on 4 adjacent 12.5 KHz channel splits in the 928-952 MHz band. The central station transceivers operate through antennas at the EOC tower. The radios shall meet all of FCC part 94 out-of-band emission requirements and shall be capable of transmitting data at 9600 baud, operating half duplex. The radio shall also be capable of communicating with the Jefferson Parish VTSCADA system via a cellular connection.

B. Frequency Plan: Jefferson Parish has FCC licenses to operate four point-to-multipoint radio systems on 12.5 KHz channels in the Power Radio Service on the frequencies shown below:

Master Transmitter East Bank Sewerage 952.45625 MHz

Master Transmitter West Bank Sewerage 952.46875 MHz

Master Transmitter Drainage 952.48125 MHz

Master Transmitter Water 952.49375 MHz

Remote Transmitters East Bank Sewerage 928.45625 MHz

Remote Transmitters West Bank Sewerage 928.46875 MHz

Remote Transmitters Drainage 928.48125 MHz

- C. The R.F. equipment furnished under these specifications shall meet or exceed all current FCC requirements for point-to-multipoint radio systems and shall also meet or exceed the following minimum specifications. The R.F. equipment shall be capable of operation on the above listed adjacent 12.5 KHz channels without degradation.
- D. The R.F. transmitters shall be directly frequency modulated by a built-in digital modem from the digital data stream furnished by the Pump Controller. The R.F. receivers shall provide a digital data stream to the Pump Controller.

Power Output (at duplex output) +39.0

Dbm Frequency Stability 1.5 PPM

Modulation Deviation +3.0 KHz

Duty Cycle Continuous

E. Receivers:

Receiver Sensitivity (10 to -6 BERT) -106

Dbm Frequency Stability 1.5 PPM

Modulation Acceptance +3.0 KHz

The radio assembly for each site shall consist of a nonprotected transmitter, receiver, power supply, and digital modem capable of operating in the 928 to 952 MHz band. Each assembly shall be capable of transmitting and receiving digital data at a rate of 9600 Baud over a 12.5 KHz FCC assigned channel. These units shall also meet the following requirements:

1. Each R.F. assembly shall be capable of operation at full performance specifications between -30 and +60 degrees centigrade with a relative humidity of 95 percent measured at +40 degrees centigrade.



2. Each R.F. assembly shall operate from a D.C. power system furnished and installed as a part of the overall installation. Battery tapping of 24-volt power systems to obtain 12 volts will not be accepted.

3. Each R.F. assembly shall be enclosed in a sturdy metal housing suitable for mounting on the back plate of the Pump Controller enclosure with stainless steel hardware, in such a manner as to permit easy removal of the radio assembly for service and/or replacement.

- F. Antenna systems shall be furnished and installed in accordance with the following specifications. The antennas for all sites shall be heavy duty Yagi type, meeting the following minimum specifications:

Frequency Range 928 to 960 MHz

Forward Gain 10Dbd

Front-to-Back Ratio 20Db

VSWR Vertical

Impedance 50 Ohms

Horizontal Beamwidth 60 Degrees (half power point)

Input Power 50 Watts

Wind Rating 150 MPH Survival (no ice)

Lighting Protection Direct Ground

Input Connector Type "N", Female

Mounting brackets shall be steel and shall be hot-dip galvanized after fabrication. All mounting hardware shall be stainless steel. Antennas at sites with wooden support poles shall be installed so that the 2-inch aluminum mast at the top of the pole extends over the top of the antenna by a minimum of 6 inches.

Note: Antenna mast and pole is not required to be furnished with the telemetry system.

- G. Transmission lines shall be Andrew Corporation Helix Type LDF4-50A ½ inch diameter foam dielectric coaxial cable, or approved equal. The coaxial cable shall be encased in a black polyethylene outer jacket. Connection shall be Type "N" male. If the length of cable required is not specified, then 100 feet of coaxial cable is required with each antenna furnished.

- H. Cellular Connection: The radio system shall be capable of communicating with the Jefferson Parish VTSCADA system via a cellular connection. The Contractor shall be responsible for providing the radio system with a one-year cellular plan, and include setup of the private network that will segregate SCADA data from public interest.

Radio: Radio equipment shall be GE MDS Orbit LN series. The approved radio devices are listed below.

MXNCL9CN4G1N1S2FASUNN Orbit MCR LN9 Licensed Narrowband + 4G LTE North America  
Verizon with GPS, 1 Ethernet 2 Serial

Contractor shall coordinate the details of the radio system to be provided with Jefferson Parish prior to purchase.

#### 2.04 Battery Backup

Battery backup system shall be correctly sized to power the Controller, radio, and I/O system for a minimum of 8 hours. Batteries shall be sealed gel cell type lead acid.

#### 2.05 Primary Reactive Air Level Monitoring System™

The primary level monitoring shall be a Reactive Air System Level Monitoring System™ as manufactured by TESCO Controls, Inc., and shall consist of an air compressor, compression bell, 3-way solenoid valve, and level transducer. The level transducer senses the back pressure of the static air column set up in the compression bell that is periodically replenished by the purge air compressor. The compression bell shall be 316 stainless steel as specified, and be designed for resistance to buildup of foreign material. The compression bell shall also be designed to travel within a PVC-type stilling well. The stilling well, which is not part of the Reactive Air Level Monitoring System™ and therefore not subject to be supplied by the level monitoring system supplier, shall be 4-inch PVC conduit to match the depth of the wet well. The stilling well shall have several holes in various locations on the PVC – holes shall be punched to allow flow of liquid into and out of the stilling well. The specially designed programmed multi-cycle cleaning system shall prevent the compression bell from plugging while minimizing compressor run time. The reactive air control shall also provide a means of manually actuating the purging cycle when immediate purging and cleaning is necessary. Compressors shall start against a 250-psi head, and shall be furnished with a written 10-year warranty.

## 2.06 Reactive Air Level Monitoring System™ – Redundant Backup

Provide control system back up Reactive Air Level Monitoring System™ air bell with stainless steel mounting hardware. The air bell shall be 6 inches in diameter, with ¼ inch par flex tubing run continuously to the Pump Control Panel. The bottom of the bell shall be furnished with a pointed cone wire stainless steel mesh to prevent entry of grease or debris into the bell. A pressure switch mounted in the Pump Control Panel shall operate both pumps on high level, and stop the pumps on low level (below the bottom of the bell). Back up control system will only operate if the Programmable Pump Controller (PPC) is inoperable. Back-up Reactive Air Level Monitoring System™ air bell shall be mounted as specified.

## PART III: QUALITY ASSURANCE

### 3.01 Pump Control Panel Supplier Responsibility

In order to assume electrical and control system responsibility, the above specified Pump Control Panel and level monitoring systems shall be furnished by the lift station pump supplier. In the event that there are multiple lift stations on a project, all Pump Control Panels and level monitoring systems on the project shall be furnished by the same manufacturer.

### 3.02 Warranty

Pump Control Panel components shall carry a full one (1) year replacement warranty from date of owner acceptance. Programmable Pump Controller shall carry a ten (10) year replacement warranty.

### 3.03 Spare Parts

The Pump Control Panel manufacturer shall furnish a complete set of recommended spare parts necessary for the first five (5) years of operation, which shall include at least the following:

1. 1 - relay for each type required, mounted in the Pump Control Panel
2. 1 - spare set of normally-open contacts on each motor starter
3. 1 - spare 20A circuit breaker mounted in the Pump Control Panel
4. 1 - contactor coil and one set of power contacts for each size used
5. 1 - spare TESCO L3000™ Programmable Pump Controller with site specific program preloaded

Loose spare parts shall be properly bound and labeled for easy identification, without opening the packaging and suitability protected for long storage.



## **CORPORATE RESOLUTION**

EXCERPT FROM MINUTES OF MEETING OF THE BOARD OF DIRECTORS OF

---

INCORPORATED.

AT THE MEETING OF DIRECTORS OF \_\_\_\_\_  
INCORPORATED, DULY NOTICED AND HELD ON \_\_\_\_\_,  
A QUORUM BEING THERE PRESENT, ON MOTION DULY MADE AND SECONDED. IT  
WAS:

RESOLVED THAT \_\_\_\_\_, BE AND IS HEREBY  
APPOINTED, CONSTITUTED AND DESIGNATED AS AGENT AND ATTORNEY-IN-  
FACT OF THE CORPORATION WITH FULL POWER AND AUTHORITY TO ACT ON  
BEHALF OF THIS CORPORATION IN ALL NEGOTIATIONS, BIDDING, CONCERNS  
AND TRANSACTIONS WITH THE PARISH OF JEFFERSON OR ANY OF ITS AGENCIES,  
DEPARTMENTS, EMPLOYEES OR AGENTS, INCLUDING BUT NOT LIMITED TO, THE  
EXECUTION OF ALL BIDS, PAPERS, DOCUMENTS, AFFIDAVITS, BONDS, SURETIES,  
CONTRACTS AND ACTS AND TO RECEIVE ALL PURCHASE ORDERS AND NOTICES  
ISSUED PURSUANT TO THE PROVISIONS OF ANY SUCH BID OR CONTRACT, THIS  
CORPORATION HEREBY RATIFYING, APPROVING, CONFIRMING, AND ACCEPTING  
EACH AND EVERY SUCH ACT PERFORMED BY SAID AGENT AND ATTORNEY-IN-  
FACT.

I HEREBY CERTIFY THE FOREGOING TO BE  
A TRUE AND CORRECT COPY OF AN  
EXCERPT OF THE MINUTES OF THE ABOVE  
DATED MEETING OF THE BOARD OF  
DIRECTORS OF SAID CORPORATION, AND  
THE SAME HAS NOT BEEN REVOKED OR  
RESCINDED.

---

**SECRETARY-TREASURER**

---

**DATE**



# JEFFERSON PARISH

## DEPARTMENT OF PURCHASING

CYNTHIA LEE SHENG  
PARISH PRESIDENT

RENNY SIMNO  
DIRECTOR

**September 2020**

### **Changes to Jefferson Parish Bidding Information**

The Jefferson Parish Purchasing Department would like to make vendors aware of the following changes:

**Total Bid Price Must Include the Cost of Naming Jefferson Parish as Additional Insured:**

Bidder acknowledges that Bidder recovered the cost of any required insurance in the contract price as required by La.R.S. 9:2780.1 and that Bidder recovered any such cost for the purposes of insuring an obligation to indemnify Jefferson Parish, defend Jefferson Parish, or hold Jefferson Parish harmless and that Bidder's indemnity liability is limited to the amount of the proceeds that are payable under the insurance policy or policies that Bidder has obtained.

**Electronic Procurement:** Beginning November 1, 2020, Jefferson Parish will no longer accept manual bid submissions; and will only accept bid submissions electronically via our e-Procurement system, Central Bidding. Central Bidding can be accessed by visiting either [www.centralbidding.com](http://www.centralbidding.com) or [www.jeffparishbids.net](http://www.jeffparishbids.net). All bidders will be required to register with Central Bidding. Jefferson Parish vendors are able to register for free by accessing the following link:  
<https://www.centrauctionhouse.com/registration.php>.

**Probable Construction Cost:** Per Jefferson Parish Administrative Policy, the probable construction cost is not revealed in the Jefferson Parish Bidding Documents. Jefferson Parish Administrative Policy has changed and a range of the probable construction cost will be stated in the Jefferson Parish bidding document, entitled Important Notice to All Bidders – Bid Requirements. Per Louisiana Public Bid Law, the probable construction cost will be read at the bid opening.

**Insurance Requirement:** All bidders must provide proof of valid insurance in the required amounts as stated in the Standard Insurance Requirements for bidding purposes. Failure to provide the proof of valid insurance in all of the required coverage amounts will result in bid rejection.

GENERAL GOVERNMENT BLDG. – 200 DERBIGNY ST., SUITE 4400, GRETN, LA 70053  
OFFICE 504.364.2678

JOSEPH S. YENNI BLDG. – 1221 ELMWOOD PARK BLVD., SUITE 404, JEFFERSON, LA 70123  
OFFICE 504.364.2678

EMAIL: [PURCHASING@JEFFPARISH.NET](mailto:PURCHASING@JEFFPARISH.NET) WEBSITE: [WWW.JEFFPARISH.NET](http://WWW.JEFFPARISH.NET)

## **Non-Public Works Bid Affidavit Instructions**

- Affidavit is supplied as a courtesy to Affiants, but it is the responsibility of the affiant to insure the affidavit they submit to Jefferson Parish complies, in both form and content, with federal, state and parish laws.
- Affidavit must be signed by an authorized representative of the entity or the affidavit will not be accepted.
- Affidavit must be notarized or the affidavit will not be accepted.
- Notary must sign name, print name, and include bar/notary number, or the affidavit will not be accepted.
- Affiant **MUST** select either A or B when required or the affidavit will not be accepted.
- Affiants who select choice A must include an attachment or the affidavit will not be accepted.
- If both choice A and B are selected, the affidavit will not be accepted.
- Affidavit marked N/A will not be accepted.
- It is the responsibility of the Affiant to submit a new affidavit if any additional campaign contributions are made after the affidavit is executed but prior to the time the council acts on the matter.

*Instruction sheet may be omitted when submitting the affidavit*



**Non-Public Works Bid**

**AFFIDAVIT**

**STATE OF** \_\_\_\_\_

**PARISH/COUNTY OF** \_\_\_\_\_

BEFORE ME, the undersigned authority, personally came and appeared: \_\_\_\_\_  
\_\_\_\_\_, (Affiant) who after being by me duly sworn, deposed and said that  
he/she is the fully authorized \_\_\_\_\_ of \_\_\_\_\_ (Entity),  
the party who submitted a bid in response to Bid Number \_\_\_\_\_, to the Parish of  
Jefferson.

Affiant further said:

Campaign Contribution Disclosures

**(Choose A or B, if option A is indicated please include the required  
attachment):**

**Choice A** \_\_\_\_\_ Attached hereto is a list of all campaign contributions, including  
the date and amount of each contribution, made to current or  
former elected officials of the Parish of Jefferson by Entity,  
Affiant, and/or officers, directors and owners, including  
employees, owning 25% or more of the Entity during the two-year  
period immediately preceding the date of this affidavit or the  
current term of the elected official, whichever is greater. Further,  
Entity, Affiant, and/or Entity Owners have not made any  
contributions to or in support of current or former members of the  
Jefferson Parish Council or the Jefferson Parish President through  
or in the name of another person or legal entity, either directly or  
indirectly.

**Choice B** \_\_\_\_\_ there are **NO** campaign contributions made which would require  
disclosure under Choice A of this section.

Debt Disclosures

**(Choose A or B, if option A is indicated please include the required attachment):**

**Choice A** \_\_\_\_\_ Attached hereto is a list of all debts owed by the affiant to any elected or appointed official of the Parish of Jefferson, and any and all debts owed by any elected or appointed official of the Parish to the Affiant.

**Choice B** \_\_\_\_\_ There are **NO** debts which would require disclosure under Choice A of this section.

Affiant further said:

That Affiant has employed no person, corporation, firm, association, or other organization, either directly or indirectly, to secure the public contract under which he received payment, other than persons regularly employed by the Affiant whose services in connection with the construction, alteration or demolition of the public building or project or in securing the public contract were in the regular course of their duties for Affiant; and

*[The remainder of this page is intentionally left blank.]*

That no part of the contract price received by Affiant was paid or will be paid to any person, corporation, firm, association, or other organization for soliciting the contract, other than the payment of their normal compensation to persons regularly employed by the Affiant whose services in connection with the construction, alteration or demolition of the public building or project were in the regular course of their duties for Affiant.

\_\_\_\_\_  
Signature of Affiant

\_\_\_\_\_  
Printed Name of Affiant

SWORN AND SUBSCRIBED TO BEFORE ME

ON THE \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
Notary Public

\_\_\_\_\_  
Printed Name of Notary

\_\_\_\_\_  
Notary/Bar Roll Number

My commission expires \_\_\_\_\_.